

Comparisons of Job Characteristics

Focus Occupation: Biological Scientists, All Other (19-1029)

Associated Occupation: Soil and Plant Scientists (19-1013)

[Compare Knowledge](#)

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| | |
|----|--|
| << | Focus occupation element is much lower |
| < | Focus occupation element is lower |
| 0 | Focus occupation element is at a similar level |
| > | Focus occupation element is at a higher level |
| >> | Focus occupation element is at a much higher level |

Knowledge

Similarity of Focus Occupation to Associated Occupation: 83

Focus Occupation: Biological Scientists, All Other (19-1029)

Associated Occupation: Soil and Plant Scientists (19-1013)

| Associated Occupation's Key Knowledge Elements | Average Rating, All Occupations | Associated Occupation's Rating | Focus Occupation's Rating | Evaluation of Focus Occupation |
|--|---------------------------------|--------------------------------|---------------------------|---|
| Biology | 3.7 | 18.5 | 24.4 | >> Current knowledge level is likely more than sufficient |
| English Language | 11.2 | 16.7 | 18.2 | 0 Current knowledge level may be sufficient |
| Chemistry | 4.8 | 16.0 | 16.4 | 0 Current knowledge level may be sufficient |
| Mathematics | 9.2 | 16.0 | 14.7 | 0 Current knowledge level may be sufficient |
| Food Production | 2.1 | 13.1 | 1.2 | << Extensive education and/or training may be required |
| Geography | 3.9 | 12.6 | 3.0 | << Extensive education and/or training may be required |
| Communications and Media | 5.3 | 11.0 | 8.3 | << Extensive education and/or training may be required |
| Physics | 4.3 | 10.0 | 5.9 | << Extensive education and/or training may be required |

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Skills

Similarity of Focus Occupation to Associated Occupation: 93

Focus Occupation: Biological Scientists, All Other (19-1029)

Associated Occupation: Soil and Plant Scientists (19-1013)

| Associated Occupation's Key Skills Elements | Average Rating, All Occupations | Associated Occupation's Rating | Focus Occupation's Rating | Evaluation of Focus Occupation |
|---|---------------------------------|--------------------------------|---------------------------|---|
| Science | 4.5 | 16.0 | 16.1 | 0 Current skill level may be sufficient |
| Reading Comprehension | 10.7 | 15.2 | 18.5 | > Skill level is likely sufficient |
| Speaking | 10.8 | 14.8 | 14.0 | 0 Current skill level may be sufficient |
| Judgment and Decision Making | 9.4 | 13.8 | 13.2 | 0 Current skill level may be sufficient |

| | | | | | |
|-------------------------|-----|------|------|----|--|
| Complex Problem Solving | 9.1 | 12.8 | 13.1 | 0 | Current skill level may be sufficient |
| Systems Analysis | 6.5 | 11.8 | 11.0 | 0 | Current skill level may be sufficient |
| Systems Evaluation | 6.4 | 11.1 | 10.5 | 0 | Current skill level may be sufficient |
| Mathematics | 6.2 | 10.6 | 12.6 | > | Skill level is likely sufficient |
| Operations Analysis | 5.0 | 9.4 | 5.2 | << | Extensive development of skills in this area may be required |
| Programming | 2.2 | 5.1 | 5.1 | 0 | Current skill level may be sufficient |

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Abilities

Similarity of Focus Occupation to Associated Occupation: 95

Focus Occupation: Biological Scientists, All Other (19-1029)
Associated Occupation: Soil and Plant Scientists (19-1013)

| Associated Occupation's Key Abilities Elements | Average Rating, All Occupations | Associated Occupation's Rating | Focus Occupation's Rating | Evaluation of Focus Occupation | |
|--|---------------------------------|--------------------------------|---------------------------|--------------------------------|---|
| Inductive Reasoning | 10.2 | 15.1 | 16.1 | 0 | Current ability level may be sufficient |
| Deductive Reasoning | 10.6 | 14.7 | 15.6 | 0 | Current ability level may be sufficient |
| Speech Clarity | 10.2 | 13.8 | 13.0 | 0 | Current ability level may be sufficient |
| Originality | 7.6 | 13.7 | 12.0 | < | Some improvement in abilities may be required |
| Category Flexibility | 9.0 | 13.3 | 13.2 | 0 | Current ability level may be sufficient |
| Information Ordering | 9.9 | 12.3 | 13.0 | 0 | Current ability level may be sufficient |
| Fluency of Ideas | 7.6 | 12.2 | 12.6 | 0 | Current ability level may be sufficient |
| Far Vision | 7.8 | 11.2 | 9.8 | < | Some improvement in abilities may be required |
| Number Facility | 6.3 | 10.7 | 11.8 | > | Current ability level is likely sufficient |

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

There are no common work activities.

Tools and Technologies that Both Occupations Have in Common

Similarity of Focus Occupation to Associated Occupation: 74

Focus Occupation: Biological Scientists, All Other (19-1029)
Associated Occupation: Soil and Plant Scientists (19-1013)

| Tools and Technologies | Exclusivity |
|---|-------------|
| Business function specific software | 1 |
| Chemical evaluation instruments and supplies | 10 |
| Chromatographic measuring instruments and accessories | 16 |
| Computers | 1 |
| Content authoring and editing software | 1 |
| Data management and query software | 1 |
| Development software | 4 |

| | |
|---|----|
| Electrochemical measuring instruments and accessories | 9 |
| General laboratory glassware and plasticware and supplies | 13 |
| Industry specific software | 1 |
| Information exchange software | 1 |
| Laboratory baths | 24 |
| Laboratory centrifuges and accessories | 13 |
| Laboratory electrophoresis and blotting system and supplies | 26 |
| Laboratory enclosures and accessories | 17 |
| Laboratory heating and drying equipment | 13 |
| Laboratory incubating equipment | 20 |
| Laboratory mixing and stirring and shaking equipment and supplies | 19 |
| Laboratory ovens and accessories | 15 |
| Spectroscopic equipment | 10 |
| Test Tubes | 26 |
| Viewing and observing instruments and accessories | 4 |
| Weight measuring instruments | 7 |

Not all positions in these occupations will necessarily use all of the listed tools and technologies. The exclusivity rating is an indication of how unique the tool or technology is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations use that tool or technology.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.